

**C. Remarks**

The claims are 1-3, 5, 10-13 and 30-34, with claim 1 being the sole independent claim. Claim 9 has been cancelled. Claim 1 has been amended to clarify the invention. Support for this amendment may be found, inter alia, in the specification at page 15, lines 26-27. Previously cancelled claims 4 and 6-8 have been re-represented, respectively, as new claims 31-34. No new matter has been added. Reconsideration of the present claims is expressly requested.

Claims 1-3, 5, 10-13 and 30 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent No. 5,525,446 (Sypula) in view of JP 4-255332 (Mitsubishi). This rejection is respectfully traversed.

Prior to addressing the merits of rejection, Applicants would like to briefly review some of the key features and advantages of the presently claimed invention. The present invention is related to an endless belt, which has a single-layer structure. The inventors have conducted extensive studies to find a material that could be used for such an endless belt. Specifically, the belt should have sufficient durability and performance characteristics, such as a resistance of  $1 \times 10^0$  to  $1 \times 10^{14} \Omega$ , to be an intermediate transfer member for electrophotography. Applicants have found that a thermoplastic resin having a diphenyl sulfone structure represented by formula (1) can provide the desired characteristics if used in a single-layer structure together with a conductive agent.

Sypula discloses an intermediate transfer member for an electrophotographic system. Sypula teaches that 4,4'-dihydroxy-diphenyl-sulphone is an example of a material that can be used in the transfer member. However, Sypula does not

disclose or suggest an intermediate transfer member having a single-layer structure as presently claimed. Specifically, the intermediate transfer member in Sypula has a film base layer and a top thermoplastic film forming polymer layer, which are bonded together by an adhesive, i.e., a multi-layer structure. Furthermore, this reference fails to disclose or suggest an endless belt having a single-layer structure that has durability and transfer properties, e.g., a resistance of  $1 \times 10^0$  to  $1 \times 10^{14} \Omega$ , which allow it to be used as an intermediate transfer member of an electrophotographic system. Accordingly, Sypula cannot affect the patentability of the presently claimed invention.

Mitsubishi cannot provide the teachings missing in Sypula. Mitsubishi discloses that a resistance control endless belt having a single-layer structure is produced by melt-extruding a thermoplastic resin. As examples of a thermoplastic resin, Mitsubishi mentions at least one or a mixture of two or more compounds selected from a polycarbonate, polyethylene terephthalate, polyether ether ketone, polyvinylidene fluoride, a polyamid, an acryl, a polyolefin, a polysulfone, a polyether sulfone, an ethylene-tetrafluoroethylene copolymer, an acrylic copolymer, a polyester ester copolymer, a polyether amide copolymer, an olefin copolymer and a polyurethane copolymer. However, Mitsubishi does not disclose or suggest a thermoplastic resin as presently claimed, nor does this reference disclose or suggest the effects achieved thereby. There is no disclosure or suggestion in either cited reference that a diphenyl sulfone structure represented by formula (1), as presently claimed, can or should be used in a single-layer belt with a resistance of  $1 \times 10^0$  to  $1 \times 10^{14} \Omega$ .<sup>1</sup> Accordingly, Mitsubishi, whether considered separately

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1/ At most, Sypula teaches that a diphenyl sulfone can be used in a multi-layer belt, as discussed above.

or in combination with Sypula, cannot affect the patentability of the presently claimed invention.

Wherefore, Applicants respectfully request that the outstanding rejection be withdrawn and the present case be passed to issue.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address given below.

Respectfully submitted,



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